Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Public Notice Seeking Comment on the	)	WC Docket No. 10-188
Business Broadband Marketplace	)	

OPENING COMMENTS OF THE CALIFORNIA ASSOCIATION OF COMPETITIVE
TELECOMMUNICATIONS COMPANIES ON THE BUSINESS BROADBAND
MARKETPLACE

October 15, 2010

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Table of Contents

Pursuant to the Commission's Public Notice Requesting Comment,[1] the

California Association of Competitive Telecommunications Companies[2] ("CALTEL")

files the following comments on behalf of its members.[3] CALTEL appreciates the

opportunity to provide the Commission with information about how its member

companies use technologies and facilities to provide products and services to small and

medium business customers in California, and about the strong connection between

CLECs, those businesses, and influential small business advocacy groups that represent

them.

I.   **Introduction and Summary**

Small and medium businesses, including very small businesses, ("SMBs") are the

lifeblood of CLECs in California. And those CLECs, in turn, regularly provide SMBs

with innovative and cost-effective telecommunications services that would otherwise be

unattainable for many of them.

Through these comments, CALTEL wants to answer the questions posed by the

Commission by giving the Commission a window into the ways that three very different

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[1]   Pleading Cycle Established for Comment on the Business Broadband
Marketplace, Federal Communications Commission WC Docket No. 10-188 (DA 10-
1743), September 15, 2010.

[2]   CALTEL is a non-profit trade association working to advance the interests
of fair and open competition and customer-focused service in California
telecommunications. CALTEL members are entrepreneurial companies building and
deploying next-generation networks to provide competitive voice, data, and video
services. The majority of CALTEL members are small businesses that help to fuel the
California economy through technological innovation, new services, affordable prices
and customer choice. A list of all members of CALTEL can be found at
http://www.caltel.org/members2.html.

[3]   *See* www.caltel.org for a list of CALTEL member companies.

CLECs – TelePacific Communications, Creative Interconnect Communications and Sonic Telecom – serve different slices of the SMB market in California.

The stories below show that the experiences of CLECs, while different, share common threads. Each company found its own, innovative ways to provide broadband services. Each depends on having access to last-mile facilities to serve their customers. And the much-maligned copper loop is an essential component of the cost-effective, high-quality broadband services they provide. Access to fiber, in the feeder plant (between central offices and serving area interfaces or remote terminals), in building laterals, and for interconnection with other carrier networks, is equally critical. And companies like Creative Interconnect (and other CALTEL members) need access for IP to IP interconnection that avoids TDM conversion altogether.

Access is a word that gets tossed around a lot in the telecom world, and it can have many different meanings. For the CLECs described below, "access" may as well mean "customer." Because without access to buildings – without access to end-users – there are no customers to buy the services these companies offer. So another characteristic shared by these companies is that when there are barriers to customer access, like high special access rates, the inability to order DS1 transport UNEs in an "unimpaired" central office, or UNE rates that disappear with no cost-based replacement – CLECs simply cannot serve the customers behind those barriers.

But the story of broadband in California is not a one-way, CLEC-focused story. The first question of product development is "will the dog eat the dog food?" A CLEC could deploy the most cutting-edge, interesting services in the world, but if customers aren't interested in them, then all the access in the world will make no difference.

Happily, SMBs in California recognize the value of CLECs and the services they provide: so much so that Small Business California – a grass-root, non-partisan, non-profit advocacy group that represents over 4000 small businesses in California – was a primary supporter of legislation sponsored by CALTEL to help preserve CLEC access to customers in California. CALTEL has worked hard to foster and cement the relationships between CLECs and SMBs in California, and these comments will conclude by showing the Commission the extent and the value of those relationships.

II.   CALTEL Members are Small Businesses Serving Small Businesses

CALTEL is a 501(c)(6) non-profit trade association that was established in 1983 to advance the interests of non-dominant long distance carriers. Following passage of the Telecommunications Act of 1996, CALTEL refocused its mission in order to advocate on behalf of the competitive local exchange carriers (CLECs) that were being certificated by the California Public Utilities Commission (CPUC) to provide resold and facilities-based local services to mass market and commercial customers in California.

Due to a number of regulatory, legislative, judicial and industry developments over the past decade, current CALTEL member companies predominantly provide products and services to very small, small and medium business customers or to other carriers (wholesale services).[4] CALTEL currently has twenty-one (21) member

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[4] There is a lot of controversy amongst IT professionals and market analysts regarding how to segment the business telecommunications and information technology market. Generally, there is some agreement that there are at least three categories: 1) very small business (VSB), sometimes referred to as small office/home office (SOHO), 2) small and medium business customers (SMB or SME) and 3) large business or enterprise customers. Most analysts further define the SMB/E market into more granular segments: 1) Small Business, for companies with 20-99 employees, and 2) Medium Business, for companies with 100-499 employees. Other analysts believe that segments

companies, ranging from large global corporations like Level 3 Communications to small regional new entrants like Blue Rooster Telecom. Fifteen of the twenty-one member companies are headquartered in California, and the association's Bylaws require that at least three of its eleven Board members must represent a member company whose principal place of business is located here.[5]

III. Profiles of Three CALTEL Members: Three Different Business Models and Target Markets

In its Public Notice, the Commission requested information about the current size and characteristics of business broadband markets as well as emerging market trends. While there are a number of market studies publicly available and easily found on the Internet, the cost to purchase these studies generally prohibits CALTEL from accessing them.[6]

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should be based on total revenues vs. number of employees. *See, e.g.,* http://www.pcmag.com/encyclopedia_term/0%2C2542%2Ct%3DSMALL AND MEDIUM BUSINESS&i%3D51543%2C00.asp and http://en.wikipedia.org/wiki/Small_office/home_office and http://en.wikipedia.org/wiki/Small_business and http://en.wikipedia.org/wiki/Small_and_Medium-sized_Enterprise. *But see* http://gadishamia.wordpress.com/2007/10/02/9/ for a discussion of alternate segment definitions that might be more useful.

[5] The current CALTEL Board of Directors has eleven members, 8 of whom represent member companies that are headquartered in California. *See* http://www.caltel.org/officers.html.

[6] *See, e.g.,* IDC's February, 2010 "SMB Telecom Analysis: Emerging Services Survey Results," available for $4,500 at http://www.idc.com/getdoc.jsp?containerId=221948, Yankee Group's October, 2009 "CEO to SMBss: Cut Costs and Go Anywhere, Too, available for $495.00 at http://shop.yankeegroup.com/product/244/CEO-to-SMALL AND MEDIUM BUSINESSs%3A-Cut-Costs-and-Go-Anywhere%2C-Too , and Insight Research's May, 2010 "Carriers and Ethernet Services: Public Ethernet in Metro & Wide Area Networks 2010-2015," available for $3,995 at http://www.insight-corp.com/reports/ethernet10.asp .

CALTEL next considered trying to gather aggregated data from its members to address the Commission's questions. But the wide variance in member business models, operating territories, and target customer segments, as well as the challenges of protecting company-specific proprietary data, made that approach equally unworkable.

In the end, though, our third approach proved the best. Below, CALTEL has provided in-depth profiles of three of its members that give the Commission real, fact-based insight into the SMB market and the way competitors serve it.

A.   **TelePacific Communications: 5 Lines to 500 Lines**

TelePacific Communications is the third largest telecommunications provider in California (behind AT&T and Verizon), and second largest provider of products and services to business customers. TelePacific was founded in 1998, is privately held, and is headquartered in Los Angeles. The Los Angeles Business Journal has recognized it for the last four years running as among the largest and fastest growing private firms in the L.A. area. Inc. Magazine recognized it for the past three years as one of the "Fastest Growing Private Companies in America," and Phone+ Magazine made TelePacific a Top 50 Channel Program winner.[7]

1.   **Network and Addressable Market**

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[7] *See* http://www.reuters.com/article/idUS230730+16-Nov-2009+PRN20091116, http://www.prnewswire.com/news-releases/telepacific-communications-named-one-of-inc-magazines-top-100-fastest-growing-private-companies-in-america-101518854.html and http://www.telepacific.com/about/press/release-template.asp?id=2162.

TelePacific exclusively serves the California and Nevada geographic markets, and

with approximately 38,000 customers with over 1.2 million access lines, calculates that it

has 47% of the CLEC market share in that footprint.[8] Other fast facts about TelePacific

include the following:

Number of Employees:	1,125
Number of Offices:	21
Number of Call Centers:	3
Number of Collocations:	370
Number of Fiber Strand Miles:	37,000
Number of Switches	19
Number of Lit Buildings:	200

TelePacific believes that its extensive network and operational presence across

these two states provide it with the ability to serve up to 95% of the addressable business

services market. Yet even with this extensive market penetration and investment in

network facilities, it remains heavily dependent on access to ILEC last-mile facilities, and

estimates that approximately 40% of its operating expense is allocated to leasing last-mile

special access or UNE circuits.[9] TelePacific has also explored purchasing alternate last-

mile access from other non-ILEC vendors (e.g. Clearwire), but the lack of Quality of

Service ("QoS") standards made that option insufficiently reliable to meet the needs of

business customers for integrated voice-and-data and WAN services. In addition to last-

mile access, TelePacific also leases inter-office transport from eleven (11) carriers, but

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[8] *See* http://www.telepacific.com/why/clec.asp.

[9] *See*
http://www.hatterasnetworks.com/default.aspx?pagename=maximizeProfitsByLowering
CapExAndOpEx. Hatteras Networks, a leading Carrier Ethernet equipment provider,
quoting market research by Infonetics Research and says: "These savings are all the more
significant given the estimated 40% of operating budgets that carriers spend on the access
portion of the network infrastructure, according to Infonetics Research."

calculates that it has the option to purchase that access from a non-ILEC vendor only about 50% of the time.

2.   Price and Customer Service

Most communications purchases by small and medium business customers are the result of "consultative selling," a process whereby the carrier engages the customer to determine its needs and develop a customized solution to meet those needs. This approach means that it is difficult to obtain or draw meaningful conclusions from generic price lists or tariffs for business products and services. TelePacific offers service to about 700 potential new customer locations each month, and responds to hundreds of RFI/Ps each month.

Although TelePacific's bids are always price-competitive, they do not necessarily win bids because they are the low-cost provider. Most frequently, customers choose TelePacific because of the services it provides: because the company has demonstrated that it can best integrate a communications solution for multiple customer locations, or because it guarantees a higher level of customer response and service. For some rural business customers that are too far from the nearest central office to obtain business DSL from the ILEC, but who need fast and reliable broadband at less than T3 prices, a customized voice-and-data solution from TelePacific has proven to be the only real option.[10] At the other end of the scale, many business customers in urban areas, especially those that are fairly sophisticated and need a high level of redundancy or data

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[10] *See* American Dairy Parks/Bio Energy Solutions/Blue Ribbon Cheese customer testimonial video at http://www.telepacific.com/why/testimonials-american-dairy.asp.

security, will split their communications purchases between TelePacific and the ILECs,

or between TelePacific and other large CLECs like XO Communications Services.

TelePacific takes special pride in the fact that it is so committed to service quality

that the company created their own set of customer service metrics that they measure and

which the executive team reviews on a weekly basis. Using these metrics, TelePacific

can demonstrate to new customers that 95% of calls into customer care are answered in

30 seconds or less, that 93% of problems are resolved on the first call, and that 99% of

customer bills are timely and accurate.[11] TelePacific, like other CALTEL members,

invests in external monthly customer surveys, polling 2,000 customers each month to

gauge and improve the business customer experience. They also provide the direct phone

numbers of their key executives to every customer—as their website says "try to get that
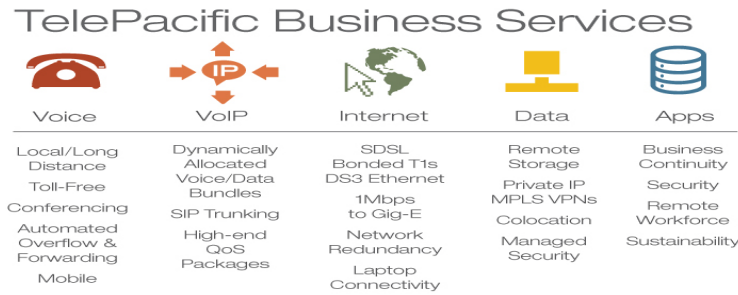
from AT&T or Verizon." [12]

3. Products and Services

TelePacific offers a wide range of products and services to business customers,

"everything from bite-sized voice and data solutions that start at just 5 phone lines all the

way to multiple PRIs (Primary Rate Interface circuits) and high-speed Internet access up

to 100 Mbps."[13] TelePacific categorizes the products and services it provides to business

customers into 5 groups: Voice, VoIP, Internet, Data and Applications.

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[11] *See* http://www.telepacific.com/why/service.asp.

[12] *Id*.

[13] *See* http://www.telepacific.com/pdfs/Company%20Snapshot.pdf.

TelePacific's experience confirms the trends that have been reported by the press: business customers are now moving quickly to adopt IP-enabled voice-and-data solutions. [15] Over the past year, the percentage of TelePacific customers purchasing an IP-enabled service has increased 80%. Bandwidth demand has doubled over that same period as reported in TelePacific's Form 477 data.[16] A Deloitte Consulting survey noted as early as 2006 that small and medium business customers are generally "too large to be satisfied with a simple [legacy] T1 line and too small to afford or to manage a DS3 connection."[17] Many TelePacific customers now view 10 Mbps as the "new T1." [18]

4.   **Technologies and Facilities**

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[14] *Id*.

[15] *See* for example Von/Xchange, "Business VoIP Revenue Up 8% in 1H2010," October 1, 2010, http://www.von.com/news/2010/10/business-voip-revenue-up-8-percent-in-first-half.aspx, and "XO Surpasses 1M Business VoIP Users," October 5, 2010, http://www.von.com/news/2010/10/xo-surpasses-1m-business-voip-users.aspx.

[16] CALTEL believes that recent changes to the Form 477 data could prove very helpful to the Commission in gathering some of the data requested in the Public Notice.

[17] *See* "A Window of Opportunity: SMB Communications: How Does the Number of Sites Drive Small-and-Medium-Size Business Communications Spend?" November 8, 2006 (attached and no longer available online) at page 3.

[18] *See* http://www.telepacific.com/offer/data-network/ethernet-access.asp.

In order to provide these new products, TelePacific must adopt new technologies, upgrade their existing facilities and ensure they can lease or buy the necessary last-mile connections to justify their investment.

TelePacific offers three varieties of Metro or Carrier-Class Ethernet services: Ethernet over Copper, Ethernet via TDM (i.e. over legacy T1 and T3 circuits), and Ethernet over Fiber.[19]

Ethernet over Copper is by far the most affordable and most in demand. Ethernet over Copper is a relatively new technology that bonds together multiple slower-speed copper circuits into a high-speed link and allows carriers to deliver integrated voice-and-data services over the existing copper infrastructure to small and medium business customers whose application requirements fall within the bandwidth gap between a single T1 and a T3. A leading vendor of Ethernet over Copper equipment is Hatteras Networks, and in an *ex parte* presentation to the FCC in 2008, they explained that while legacy T1 circuits (2-pair) deliver 1.5 Mbps, Mid-Band Ethernet can deliver seven times more bandwidth (approximately 11.4 Mbps) over two bonded 2-wire circuits (2-pair).[20]

For business customers, the plug-and-play advantage of Ethernet solutions also makes them cost-effective and extremely scalable. Circuits can be plugged into a LAN router with no need for expensive protocol conversion CPE (customer premises equipment). And small and medium businesses can initially opt for a single pair at

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[19] *Id.*

[20] *See* Ex Parte Notice by Hatteras Networks, Inc., "Mid-Band Ethernet: Leveraging Copper, A National Treasure," Federal Communications Commission WC Docket No. RM 11358, January 29, 2008.

approximately 3 Mbps (up to 5000 feet), and increase bandwidth incrementally with additional pairs without investing in new or additional CPE.

As Hatteras further notes, fiber deployment (*e.g.* a T3, or DS3, circuit or direct fiber into a building) does not become economically viable until a business customer requires over 20 Mbps of bandwidth (generally a large enterprise business customer).[21] Because of this, a 2008 study by Insight Research estimates that "only 12-14% of US office building have fiber connections, and many unserved buildings may never cost-justify installing fiber."[22] The remaining 87% of business locations are therefore prime candidates for this revolutionary copper-based technology, and a May, 2010 analysis by Insight Research forecasts continued astronomical growth in all segments of the Ethernet services market over the next five years: from $2 billion in 2008 to $3.2 billion in 2010, and more than triple over the forecast period to over $9.7 billion by 2015.[23]

Of course, for TelePacific and other CALTEL members, Ethernet over Copper is not a hypothetical solution for the future. They are working hard to keep up with the now exploding customer demand for products that rely on this technology. Today 68 of TelePacific's collocations enable Ethernet over Copper-capable, and they expect to bring another 52 online by the end of 2Q11.

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[21] *See* http://www.hatterasnetworks.com/Default.aspx?pagename=introducingmidband.

[22] *See* Press Release "New Copper Bonding Products for Telecommunications Will Grow Carrier Ethernet and Wireless Backhaul Markets Worldwide, Says Insight Research Corporation," http://www.insight-corp.com/pr/2_4_08.asp.

[23] *See* Insight Research Corporation, May 2010 "Carriers and Ethernet Services: Public Ethernet in Metro & Wide Area Networks 2010-2015, Executive Summary" at http://www.insight-corp.com/reports/ethernet10.asp.

TelePacific also has a small number (200) of "lit buildings" where the size of the

customer and/or the economics of bringing fiber into the building has proven to be

economically viable. In reaching those customers, TelePacific has gained significant

experience in the complexities and high costs facing CLECs trying to deploy fiber and /

or interconnect with ILEC fiber.

For example, as part of a larger fiber ring augmentation between San Francisco,

Marin and Alameda counties, TelePacific constructed a 100-foot lateral in Oakland,

California. The total cost was $52,000, roughly broken down as follow:

- Engineering costs: $3,600
- Survey of city monument: $1,605 (the city engineer's charges to review post-construction to ensure that a survey marker remained intact)
- As-built drawings: $500
- Construction/conduit placement: $33,299 (trenching approximately 100 feet)
- ADA (Americans with Disabilities)-compliant Ramp: $2,459 (Although TelePacific was trenching more than 20 feet from the intersection, the city asked them to build an ADA-compliant ramp at the intersection in exchange for processing the application)
- Splicing Material: $300
- AT&T Engineering and Inspection Charges: $7,000
- City Permit and Inspection Charges: $3,315

Laying fiber within the San Francisco city limits is more expensive and continues

to get worse. On recent projects the cost of trenching has started at $417 per foot. And in

addition to the standard moratorium of not digging up the streets within five years of

repaving activity, the city has instituted an intersection improvement charge of $8,000 per

quadrant. TelePacific is currently deploying a diverse entry into the Bush Street central

office, and must pay a contractor an additional $16,000 to cover the repaving costs and be

able to cross the intersection of Bush and Kearney.

Costs to lay fiber outside of the San Francisco Bay Area and Los Angeles are also high. Last year, TelePacific undertook a project to add three central offices in Stockton, Fresno and Bakersfield to its existing fiber run through the Central Valley. The project ended up costing nearly $2 million and took more than 18 months.

5. Wholesale Services

Finally, TelePacific leverages its extensive network footprint and purchasing power to provide wholesale services to independent ISPs, IXCs, and small CLECs.[24] TelePacific and other competitive carriers that provide wholesale services thereby enable additional competitive choice for residential as well as business customers. TelePacific offers a variety of wholesale products and services, including carrier customers that purchase nearly 150,000 loop-and-port combinations, a replacement for the UNE-P product that is no longer available from the ILECs except via significantly more expensive commercial agreement rates.

B. Creative Interconnect Communications: A Radical Shift from Legacy Telecom to Hosted VoIP/Ethernet Solutions

Creative Interconnect Communications LLC is a small competitive carrier that traces its roots back to 1975, when it provided telephone equipment to residential customers. Headquartered on the San Francisco Bay Peninsula in San Carlos, California, Creative Interconnect made a decision in 2007 to abandon its TDM network in order to

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[24] *See* http://www.telepacific.com/pdfs/Company%20Snapshot.pdf.

build an all-IP network and transition customers from legacy PBXs to hosted VoIP and

Metro Ethernet. Creative Interconnect's CEO, Bill Wilde, was also the Vice President,

CTO and a founder of eXchange @ 200 Paul, one of the first and most successful carrier

"hotels" (used by carriers and large enterprise customers to interconnect with each others'

networks) in the country.[25]

1.   Creative Interconnect's Network and Addressable Market

Creative Interconnect serves 150 customers, primarily in the San Francisco Bay

area. Their hosted VoIP and Metro Ethernet product bundle best meet the need of small

and medium business customers – i.e. customers with between 6 and 100 lines. But

larger businesses, especially local government entities, often are drawn to Creative

Interconnect because of its reputation and its abilities to tie together multiple locations

with fast reliable service.

Other "fast facts" about Creative Interconnect include the following:

Number of Employees:	12
Number of Offices:	2
Number of Call Centers:	1
Number of Collocations:	6 (in ILEC Central Offices)
Number of Fiber Strand Miles:	0
Number of Switches	1
Number of Lit Buildings:	2

Earlier this year, Creative Interconnect brought online its all-Ethernet network,

which it considers to be "the most advanced network of its type in Northern California."[26]

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[25] *See*
http://www.telx.com/ArticlePDF/meet%20me%20in%20San%20Fran%20July%202003.pdf.

[26] *See* http://cictelecom.com/.

A recent Carrier Evolution article summarized Creative Interconnect's decision to rebuild their network from scratch in 2007:

> By 2007, though the company made a careful review of its business strategy, and didn't like what it was seeing, namely that it was having a tougher time making a go of selling and supporting business phone systems. "We didn't want a declining business that was just harvesting its cash flow," says Bill Wilde, Creative Interconnect president. Instead, the company decided it had to get into the Ethernet access business and transition to fully-managed IP telephony services, decision that required a complete revamp of its technology approach, business practices, pricing and support models.

> "We decided it was best for us to do a greenfield build, completely new, as though we were a start-up," says Wilde. The company now operates completely in the IP domain, with the exception of the TDM trunks it must use to hand off traffic to other carriers.[27]

2. Leading Edge Products and Technologies

As early as 2006, the Yankee Group noted "CLECs have done a much better job preparing SMBs (small and medium businesses) for the converged communications world of VoIP."[28] That study showed that only 9% of ILEC small and medium business customers were purchasing VoIP service compared to 23% of CLEC small and medium business customers.[29] Other analysts predicted that ILECs would be slow to adopt IP-

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[27] *See* http://www.carrierevolution.com/articles/74201/creative-interconnect-communications-makes-radical/.

[28] VoIP as CALTEL uses it here does not equate with providing voice service using the public Internet. VoIP is the abbreviation for Voice over Internet Protocol, the same open standard that powers the Internet, but is also a standard deployed by managed packet networks capable of meeting customer quality and security expectations.

[29] *See* Yankee Group's "How Do SMBs Fare in the CLEC Versus ILEC Matchup?" (attached and no longer available online) at page 6.

based product offerings because of concerns "about T1 loss and cannibalizations by cable companies."[30]

Market analysts generally concurred at the time that small and medium business customers are attracted to the scalability and ability to integrate voice, data, and managed services (convergence) that is available from IP-enabled product offerings. Deloitte Consulting further concluded that the number of locations that a small and medium business customer has is directly correlated to more IP-centric spending.[31] Once a small and medium business customer has employees in two or more locations, the need to communicate and network internally becomes the driver of communications spending. And data is perceived to be more important than voice; the survey showed that small and medium business using VoIP spent $61 per employee monthly on voice and $45 on data, while those with traditional landlines spent $64 on voice and $23 on data. And, most importantly (at least to CALTEL members), the Deloitte survey concluded that VoIP users are 60% more likely to use non-ILEC services.[32]

These studies were published the year before Creative Interconnect decided to rebuild its network and product portfolio from the ground-up, and offer Hosted VoIP and Metro Ethernet, over an-all Ethernet network, to meet the communications needs of its current and new small business customers.

a)   Hosted VoIP

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[30] *See* Deloitte Consulting's "A Window of Opportunity: SMB Communications: How Does the Number of Sites Drive Small-and-Medium-Size Business Communications Spend?" November 8, 2006 (attached and no longer available online) at page 3.

[31] *Id.*, at page 4.

[32] *Id.*, at page 6.

Creative Interconnect tells its customers that it can "use CIC's extensive infrastructure and enjoy the benefits for a reasonable cost without purchasing any equipment."[33] The key benefit is that hosted VoIP eliminates the need for the business customer to invest in any phone equipment:

- No capital expenditures
  - CIC provides all of the equipment – phones, routers, and POE Ethernet switches as part of our service.
  - No need for an onsite PBX switch.
- Upgrades to your phone service are done twice a year by software, keeping your service current and avoiding replacement of hardware. This avoids costs as well as waste and disposal of hardware.
- Easily scalable – most of the time new phones can be added without additional hardware other than the phone itself which CIC supplies.
- VoIP phones operate over Cat 5 cabling (the same as your computer network), so there is no need for special cabling for your phones.
- You can move phones around your office by simply unplugging the phone and plugging it into a network jack at the new location.[34]

The hosted VoIP phone system is also very easy to customize to the needs of each individual business customer:

- The service includes Creative Interconnect's "Dashboard"
  - Individual employees can
    - View the history for incoming and outgoing calls from their handset, listen to voicemail messages and view fax messages from any Internet connected computer
    - Setup Call Forwarding and "Find Me Follow Me" features
    - Create and maintain Contact and Group Lists, including "Click to Dial"
    - Utilize "Click to Dial" Business Group Extensions
    - Utilize Call Screening
  - The designated Business Group Administrator can create and maintain hunt groups, call pickup groups, Auto Attendant and Music on Hold [35]

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[33] *See* http://www.cictelecom.com/products.htm.

[34] *Id.*

[35] *Id.*

But Creative Interconnect found that the transition from legacy PBX to hosted

VoIP was a not an easy shift:

> "People tried to tell me this was going to be a big change, but I still didn't get it,"
> says Wilde. "After 30 years in the business, I knew nothing…It was humbling."
> In a sense, Creative Interconnect "didn't know what it didn't know" about IP
> telephony, primarily that "most local area networks are in terrible
> condition[36]…Even if the customer's wiring is good, the configuration is horrible.
> They are accidents waiting to happen…having to remediate so many problems in
> the LAN was the biggest headache." But the company learned how to do the LAN
> diagnostics and remediation in house…(it did) not change any of the company's
> decisions, but Creative Interconnect underestimated what was involved in getting
> hosted IP telephony to work in an actual customer's setting. [37]

b) Metro Ethernet

Most Creative Interconnect customers purchase a combination of hosted VoIP and

Metro Ethernet to meet their voice-and-data needs. Creative Interconnect's Ethernet

product is different from other carriers because Internet traffic is transmitted in IP format

on the carrier's state-of-the-art all-Ethernet network. This is how Creative Interconnect

explains this difference to customers:

> Did you know all Internet connections are not created equal? The 'speed'
> of most Internet connections would be more accurately called a 'speed
> limit' – how fast you can go with optimal conditions such as in the middle
> of the night when there is almost no traffic. As all drivers know, the real
> measure is now fast you can actually go and how long it takes to get from
> your origin to your destination. So "65 miles per hour" is often no more
> useful a measure of performance as "3 mega bits per second." They both
> measure the wrong thing.
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> Customers on our Metro Ethernet network almost always get the full
> speed they pay for, even during Internet "rush hours," but more

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[36] In this case, Wilde is talking about the customer-owned and controlled local
area networks (LANs) and not the portion of the network controlled by the carrier.

[37] *See* http://www.carrierevolution.com/articles/74201/creative-interconnect-communications-makes-radical/.

importantly data speeds through our network at up to four times or more the speed in traditional networks, resulting in more throughput and faster downloads, uploads, and VPN connections. [38]

Although the majority of Creative Interconnect's last-mile customer connection is a form of Ethernet over Copper, their innovation of connecting that last-mile interface with an end-to-end Internet Protocol (IP) over Ethernet, or packet, network[39] virtually eliminates the inefficiencies of protocol conversions (*e.g.* IP to TDM, Ethernet to ATM or PPP, or vice versa). Internet traffic can be handed-off in true Ethernet format with fewer protocol conversions and more trouble-free networks.

One result of this dramatic change in technology is that Ethernet handoffs of data and voice IP traffic to businesses and other LECs at carrier "hotels" (like the one that Creative Interconnect CEO Bill Wilde helped found in the early 2000's) are increasingly prevalent, and the vast majority of new handoffs in datacenter facilities are in an Ethernet format.

This end-to-end Ethernet functionality pays off in benefits to customers like "contracted speed over a variety of conditions," "vastly improved support for remote workers/telecommuters," "optimized Video Conferencing" and connection of customer's "multiple locations with virtual workgroups (vlans)." Creative Interconnect's customers obtain a maximum speed of 45 Mbps over bonded copper loops (15 Mbps over bonded

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[38] *See* http://www.cictelecom.com/products.htm.

[39]*See* "The Next Step for Next Generation Technology: Interconnecting Managed Packet Networks," http://www.freetocompete.com/files/gillan_nextstep-nxtgen_2008.pdf.

T1s).[40] But educating customers about the benefits of Ethernet connectivity presents a

new marketing challenge that Bill Wilde explains this way:

> The company's marketing challenges actually have more to do with explaining why Ethernet adds value, more than anything else. "In our circles, customers are sophisticated much of the time, but even then, haven't thought about Ethernet," says Wilde. There's a customer education process nine times out of 10. We don't use the term latency, but in explaining the value, use the analogy that Ethernet is like stuffing five pounds of flour in a two-pound sack," he says. "Customers get that." [41]

3.   Price and Customer Service

Creative Interconnect promises its small business customers access to leading

edge technology and a greater variety of enhanced services at prices that are competitive

with what they are already paying for less. Some customers, their website says, receive

these benefits and even realize a savings.[42]

Creative Interconnect, like all CALTEL members, also prides itself on superb

customer service:

> But with all that technology and equipment, what really sets us apart is our people. A dedicated team of professionals who are used to providing high quality service to customers with demanding applications, day in and day out. A team which consistently completes projects on budget, with high customer satisfaction. A team which will make the extra effort to see that the customer's needs are met without being asked.[43]

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[40] Two significant constraints on getting higher speeds over special access circuits are 1) the lack of availability of a "clear-channel DS3 from AT&T and 2) the cap on the number of T1s that competitive carriers can order out of any central office, regardless of whether it is considered "impaired" or "unimpaired" by the ILEC.

[41] *See* http://www.carrierevolution.com/articles/74201/creative-interconnect-communications-makes-radical/.

[42] *See* http://cictelecom.com/.

[43] *See* http://www.cictelecom.com/aboutcic.htm.

Creative Interconnect's "radical shift" has extended to its customer support and

billing functions:

> The high-availability core network, with terminals in the field, means the company organizes its support efforts differently. The company can serve more customers with fewer support personnel, and updates are automatically loaded twice a year, without having to dispatch field staff to make the changes manually. "That doesn't happen with a PBX approach," Wilde says. Because the unified communications updates are transparent, the company doesn't have to upgrade customers location by location…

> The company also uses its own billing system, and early on discovered that its services could be sold as…flat rate services rather than needing to meter. That allowed Creative Interconnect to rework the basic billing functions first, while adding the other rating tasks later. [44]

These billing changes allow Creative Interconnect to assure customers that they

will "know the amount of (their) monthly invoice before they receive it."[45]

4.   **Technologies and Facilities**

Creative Interconnect's shift to all-IP technology radically transformed its

products, customer support needs, revenue model and marketing methods. All new

customers are supported on the new platform, and existing customers are being

transitioned from the old TDM switch so that it can be decommissioned at the end of this

year.

But even when that switch is decommissioned, Creative Interconnect will still be

unable to take advantage of the efficiencies inherent in IP communications when it

interconnects with ILECs. The current regulatory environment does not require ILECs to

provide IP to IP interconnection, and ILECs require carriers the size of Creative

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[44] *See* http://www.carrierevolution.com/articles/74201/creative-interconnect-communications-makes-radical/.

[45] *See* http://cictelecom.com/.

Interconnect to convert their traffic to TDM, even if the ILEC will re-convert the traffic back to IP, thus increasing Creative Interconnect's infrastructure cost. The ILECs do provide IP interconnection (called "peering"), but only to much larger, Tier 1 carriers, however.

Despite Creative Interconnect's multi-year, millions-of-dollars investment in its all-Ethernet network, the carrier still must rely exclusively on access to last-mile copper and UNE DS1 loops leased from AT&T to reach customer locations with its IP signals.

But Creative Interconnect can only offer services through ILEC central offices where UNE DS1 transport is available (i.e. the office is designated as "impaired" for DS1 transport) to bring the traffic back to Creative Interconnect's hub. Creative Interconnect does not have the scope or customer volume to pay discounted special access rates for transport through "unimpaired" offices, and purchasing transport off the "rack rate" for special access in these offices is cost-prohibitive. For this reason, SMBs served by impaired central offices are not able to receive the benefit of Creative Interconnect's advanced network and services. Creative Interconnect does not market to customers served by these offices and SMBs served out of these offices that call Creative Interconnect are less likely to sign up because Creative Interconnect often cannot serve them at competitive rates.

C. **Sonic Telecom and Sonic.net: The Largest "Indie" ISP in California Builds a New Network**

Sonic Telecom is a relatively new CLEC entrant in California (founded in 2006) and an affiliate of Sonic.net, the largest independent Internet Service Provider (ISP) in the state. Sonic.net was founded in 1994, and headquartered in the Sonoma Valley in Santa Rosa, California. In August of this year, Sonic launched a new network that provides voice-and-broadband services to primarily residential and very small business (VSB) customers in the San Francisco Bay area.

1. **Sonic's Network and Addressable Market**

Sonic serves approximately 3,500 customers, 3,100 of which are residential or VSBs that purchase internet service (ADSL2+), 750 that purchase voice service, and 400 small and medium business customers that purchase data-only Ethernet over Copper or bonded T1s. Other "fast facts" about Sonic.net include the following:

Number of Employees:	100*
Number of Offices:	1
Number of Call Centers:	1
Number of Collocations:	58
Number of Fiber Strand Miles:	0
Number of Switches	0**
Number of Lit Buildings:	0

* Sonic Telecom is a wholly-owned affiliate of Sonic.net; all employees work for the parent company
** Sonic Telecom purchases wholesale switching services from competitive carriers like XO Communications and Level 3 Communications

Yankee Group analyst Benoit Felten recently interviewed Sonic's CEO, Dane

Jasper, and had this to say about Sonic's revolutionary product offering:

> In an era where the buzzwords about broadband and the internet seem to be caps
> and hogs, it's reassuring and exciting to see someone trying to buck the trend and
> offer what customers want as opposed to what he thinks customers should get.
>
> Seen from the outside, the U.S. market is often considered to be a static duopoly,
> but clearly there are still interesting initiatives out there (in addition to municipal
> fiber, of course) to try and break the mold.[46]

1. Low-Price, Maximum Speed, and High Volume Products and Technologies

b) All-You-Can-Eat Broadband and POTS Voice

While CALTEL members are primarily focused on the business services market,

their operations do not approach anything close to dominance in any of the market

segments. The ILECs have always served the vast majority of VSB or SOHO customers

with POTS voice lines, DSL and bundled service plans that generally replicate the

services they offer to other mass market (*i.e.* residential) customers.

In August of this year, Sonic quietly turned up a new network called "Fusion" that

allows it to offer ADSL2+ service along with its own POTS (not VoIP) voice service to

primarily residential and VSB customers. As reported in Fiberevolution and several

other recent industry articles, Sonic.net "currently sells one offering to residential users

through Fusion: for $50 a month, they get uncapped ADSL that runs as fast as their line

can handle (up to 20 Mbps) along with free nationwide phone service. Users who want

more bandwidth can order up a second telephone line and 'bond' the two for speeds of up

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[46] *See* http://www.fiberevolution.com/2010/08/sonicnet-brings-all-you-can-eat-broadband-and-phone-to-northern-california.html.

to 40 Mbps by simply paying another $50…Unless you live far from the exchange,

Sonic.net...offers a better deal than any large U.S. carrier." [47]

While Sonic.net/Sonic Telecom's low prices are attractive, it is CEO Dane

Jasper's perspective on speed and volume ("all-you-can-eat broadband and phone") that

have Yankee Group analyst Benoit Felton, DSL Report's Dave Burstein and Nate

Anderson from Ars Technica singing its praises:

> During the construction of this network we have given a lot of thought to the business model in the US, and how we could do things in a different and more interesting way. The natural model when you have a simple duopoly capturing the majority of the market is segmentation: maximize ARPU by artificially limiting service in order to drive additional monthly spending. But fundamentally this is the wrong model for a service provider like us, and we have looked to Europe for inspiration. The model pioneered by Iliad under the Free brand is a better fit, both for us and for our customers.

> As the marginal cost of providing more bandwidth or less, and providing POTS voice or not are both minimal, we have adopted a simple flat rate model instead of the more typical US model of '$5 more goes faster'. [48]

Jasper's reference to "Iliad under the Free brand" is explained by DSL Prime's

Dave Burstein:

> Xavier Niel's 30 euro unlimited triple play took 5M customers from France Telecom, transformed the European Internet, and made him billionaire…the word came first from Paris. Benoit Felton, Europe's most interesting fiber analyst, wrote I should read his interview with Dane. Now that I've reported from the states, look for reporters to check this out and create a storm. I told Dane—who's been asking me for years whether the Free.fr model would work in the U.S.—that

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[47] *See* http://www.dslreports.com/shownews/SonicNet-Treats-Customers-Well-Earns-Praise-110203. *See also* http://arstechnica.com/tech-policy/news/2010/09/an-isp-that-knows-nothing-of-data-hogs.ars, http://www.dslprime.com/dslprime/42-d/3464-dane-bringing-high-speed-low-price-to-california, and http://www.fiberevolution.com/2010/08/sonicnet-brings-all-you-can-eat-broadband-and-phone-to-northern-california.html .

[48] *See* http://www.fiberevolution.com/2010/08/sonicnet-brings-all-you-can-eat-broadband-and-phone-to-northern-california.html.

the low price, high volume model has proven itself time and again. He hasn't quite brought U.S. prices down to French levels, but this is the biggest move in that direction since Mike Powell's rules killed the last big (D)LEC in 2003-4. [49]

b)   Price and Customer Service

Fusion Broadband and Phone is available to small business customers in the San Francisco Bay Area at $10 more per month ($60) than the residential bundle, with the same option to order a second line and bond the two lines together for twice the speed and price.[50] In addition to the Fusion Business Broadband and Phone bundle, Sonic also offers small business customers standalone business DSL ($24.95 per month), wireless broadband access ($199.00 per month), satellite broadband ($79.95 per month) and mobile broadband ($39.95 per month). All are subject to a one-year term commitment.

Sonic reports that they are generally the low price leader in residential and VSB, and generally win the business that they bid on. Sonic's customer service ratings are undoubtedly a factor as well: it has a "remarkable customer rating of 4.64 at DSL reports," a full point higher than the nearest competitor.[51]

Customers ordering Fusion Broadband are offered two ADSL2+ modem options: an ADSL2+ modem for $49 or a modem/router with WiFi for $99. Jasper notes that they "also offer(s) a technician install if (the customer) require(s) it. That's optional, and most

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[49] *See* http://www.dslprime.com/dslprime/42-d/3464-dane-bringing-high-speed-low-price-to-california.

[50] *See* http://www.sonic.net/solutions/business/onnectivity/.

[51] *See* http://www.dslprime.com/dslprime/42-d/3464-dane-bringing-high-speed-low-price-to-california, and also http://www.dslreports.com/comments/896.

people will simply plug in the modem themselves. As (the phone service) is POTS, it's all the same wiring that was in place, so it's easy." [52]

Sonic also offers business customers the option of leasing a block of 8 bridged static IP addresses ($40 per month). And customers that are relatively close to the exchange can customize their profile to adjust their upstream vs. downstream speed configuration (for example, a standard configuration that yields 18 Mbps downstream and 1 Mbps upstream can be reconfigured to double the upstream speed and still obtain 15 Mbps).

<div align="center">

d)   <u>**Technologies and Facilities**</u>

</div>

Despite the significant resources spent on the new network, Sonic.net, like all CALTEL members, relies on leasing copper loops from the ILEC to reach the customer's premise. When DSLPrime's Burstein said "Unless you live far from the exchange," Sonic.net has a very fast, low-price product to offer customers,"[53] the "unless" referred to the hybrid fiber/copper configuration of many of those loops that creates a significant gating factor for Sonic and its potential customer reach:

> Unfortunately Dane and others have to turn away about two-thirds of prospective customers. About two-thirds of lines in the U.S. are behind remote terminals or fiber (U-Verse, FiOS, etc.) Our rules prevent a competitor like Dane from getting access. That doesn't just limit the ultimate potential to less than a third of the market, it cut back the scale and efficiency and seriously raises costs. [54]

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[52] *See* http://www.fiberevolution.com/2010/08/sonicnet-brings-all-you-can-eat-broadband-and-phone-to-northern-california.html.

[53] *See* http://www.dslprime.com/dslprime/42-d/3464-dane-bringing-high-speed-low-price-to-california.

[54] *Id*.

Right now, Sonic is concentrating on collocating in ILEC central offices to expand their network. They have also been looking at the feasibility of picking up copper sub-loops at the ILEC SAI (Serving Area Interface), but think it probably makes more sense to build out from the SAI if they could solve the problem of leasing backhaul to the exchange. For example, in Sonic's hometown of Santa Rosa, AT&T has deployed 50 remote terminals behind which providers like Sonic.net are currently foreclosed from providing competitive options.

IV. CALTEL Members Are California Small Businesses Providing Products and Services to California Small Businesses

One common thread that weaves through the stories of TelePacific, Creative Interconnect and Sonic is their focus on small businesses. CLECs and small businesses form a natural mutual admiration society – most CLECs are small or medium-sized businesses themselves, and they offer other small businesses affordability, scalability and advanced services (when they can) that is not available from the ILECs.

CALTEL has been working closely with small business advocacy groups to identify issues of mutual interest and develop connections that deepen the symbiotic relationships of CLECs and SMBs.

A. The Importance of Small Business to the California Economy

According to the State of California's Governor's Office of Economic Development (CA GoED), California "is currently the eighth largest economy in the world, and the state's 2008 Gross State Product (GSP) is approximately $1.85 trillion." [55] The CA GoED explains:

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[55] *See* http://www.business.ca.gov/WhyCA.aspx.

California is home to the high-tech industries of Silicon Valley, the biotech industries of San Diego and the San Francisco Bay area, the agricultural industry of the Central Valley, and the entertainment industry of Los Angeles…California offers the unparalleled value to companies seeking the optimal business location. Our critical mass of business services, intellectual capital, financial acumen, transportation systems and market access enhance the corporate mission and make California the most efficient place to do business in the world. [56]

While the CA GoED also notes that "51 California companies are ranked among Fortune Magazine's prestigious FORTUNE 500 list of America's largest corporations," it is support for small businesses and entrepreneurs that has been an area of specific focus for this agency and the Schwarzenegger administration. The CA GoED contains a Small Business Advocate who is tasked with "increasing small business participation in government contracting, reducing overly burdensome regulations, and promoting California's economic recovery."[57] The CA GoED also staffs 35 Small Business Development Centers across the state to provide "consulting, training and coaching to California small businesses and entrepreneurs" and to assist "businesses with government contracting, securing capital, commercialization of technology, strategic planning and startup needs."[58] The Leadership of the California Legislature also sponsored California Small Business Lobby Days in both 2009 and 2010.

According to the Small Business Administration's Office of Advocacy, the 2006 census identified that employers with fewer than 500 employees made up 99.2% of the state's employers and 52.1 % of its private-sector employment. Of the 3.2 million small businesses in California, 2.6 million were owned and managed by sole proprietors. Of the

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[56] *Id*.

[57] Excerpted from handout to attendees of the Governor's 2010 Conference on Small Business and Entrepreneurship, "GoED: Introducing Our One-Stop Partners."

[58] *Id*.; *see also* http://californiasbdc.org/.

718,200 employers with less than 500 employees, 637,700 (or 89%) had less than 20 employees.[59] The CA GoED, the SBA Office of Advocacy and the Governor himself continually stress the importance of California's small businesses and entrepreneurs to the overall health and ongoing recovery of the state's economy.

B.   CALTEL Partners With Influential Small Business Groups in California

In addition to representing the competitive carrier industry before the CPUC, the California State Legislature and the Governor's Office, CALTEL's Executive Director has attended the Governor's Small Business and Entrepreneurship Conferences for the past two years and participated on one of the policy committees working to develop a set of regulatory reform recommendations.

CALTEL is even more proud of its Affiliate Membership in and partnership with Small Business California (SB-Cal).[60] SB-Cal is a grass-root, non-partisan, non-profit advocacy group that represents over 4000 small businesses in California, and received over 2,700 responses to its 2010 Small Business Issues Survey.[61] The leadership and advocacy of SB-Cal's President, Scott Hauge, was recently acknowledged in remarks by Speaker of the House Nancy Pelosi at the enrollment ceremony for HR 5297, the Small Business Jobs Act:

> In the name of America's small business people, we will send to President Obama legislation that will unleash hundreds of billions of dollars in loans for America's small businesses, create half a million new jobs, and provide billions of dollars in

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[59] *See* http://www.sba.gov/advo/research/profiles/09ca.pdf.

[60] *See* www.smallbusinesscalifornia.org/.

[61] *See* http://www.zoomerang.com/Shared/SharedResultsSurveyResultsPage.aspx?ID=L247A8TNDLL3.

tax relief…Earlier this month, I joined…our small business owners in our own districts to hear about the challenges they are facing. They told me, once again, about difficulties obtaining capital they need to keep their doors open and to grow. Indeed, 45 percent of small businesses seeking loans were unable to get their credit needs met last year. **I heard that day from a longstanding leader for San Francisco's and California's small businesses, Scott Hauge. He said, "All we are asking for is this: lend us the capital so that we can create the jobs. It's what we do best." [62]**

C.   SB-Cal Recognized the Competitive Options Offered by CALTEL Members by Supporting CALTEL-Sponsored Legislation on Section 251/271 Forbearance Petitions

CALTEL's relationship with SB-Cal extended to telecommunications issues this year with the passage and enrollment of CALTEL-sponsored legislation, California Assembly Bill 1315. When a §251 and/or §271 Forbearance Petition is filed for one or more California Metropolitan Statistical Areas (MSAs), AB 1315 requires the California Public Utilities Commission to gather thorough and impartial competitive data and file comments with this Commission based on that information.[63]

SB-Cal was one of the primary supporters of AB 1315 because they recognize the importance of the competitive options that CLECs provide to small business customers. As they stated in the support letters that they provided to the policy committee chairs and Governor Schwarzenegger:

> Because of the important ramifications that such forbearance petitions could have on competitive carriers, <u>most of whom are small businesses</u>, and on competitive choice for California consumers, <u>especially small and medium business</u>

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[62] *See* http://www.smallbusinesscalifornia.org/Pelosi%20Remarks%20at%20Enrollment%20Ceremony%20for%20Small%20Business%20Legislation.htm. Earlier this year, Scott and the role of SB-Cal were also profiled by the L.A. Times. *See* www.latimes.com/business/la-fi-himi-hauge-20100530,0,1938323.story.

[63] http://info.sen.ca.gov/pub/09-10/bill/asm/ab_1301-1350/ab_1315_bill_20100927_chaptered.pdf.

customers, it is good public policy to ensure that comprehensive and relevant market information is provided to the FCC regarding such petitions in order to help the FCC thoroughly examine those petitions and make the most informed decisions possible as to their adoption or denial.[64]

V.   CONCLUSION

CALTEL appreciates the opportunity to provide the Commission with information about how it partners with the small business community in California, and about how three of its member companies serve small business customers in California. The Commission need only take a look at all CALTEL member company websites to appreciate the time and resources, commitment and pride, they put into taking care of their small and medium business customers. The majority of CALTEL members are small companies themselves; they are always aware that their customers are not without other service provider options, and that excellent customer care is one of the most important reasons that they continue to purchase services from them.

CALTEL looks forward to participating in this critical proceeding in the future.

Respectfully submitted,

/s/ Sarah DeYoung   /s/ Clay Deanhardt

_____   _____

Sarah DeYoung   Clay Deanhardt
Executive Director   Law Office of Clay Deanhardt
CALTEL   Attorney for CALTEL

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[64] *See* Letter to The Honorable Alex Padilla, Chair, Senate Committee on Energy, Utilities and Communications, RE: AB 1315 (Fuentes) Telecommunications: Public Utilities Commission: Federal Communications Commission: Forbearance Petitions – SUPPORT, from Scott Hauge, President, Small Business California, dated June 22, 2010.

How Do SMBs Fare in the CLEC Versus ILEC Matchup?

Executive Summary

Decision Point:	Strengthening SMBs' Customer Satisfaction with and Loyalty to Vendors and Service Providers
The Bottom Line:	CLECs have exhibited a marketing presence and product development resurgence. Their continued focus on customer satisfaction, aggressive sales tactics and leading-edge SMB offerings make them worthy adversaries for the ILECs.
Key Concepts:	CLEC, ILEC, customer satisfaction, VoIP, IP
Who Should Read:	CMO, CSO, senior VP, VP and director of customer care, sales, sales support, marketing, and strategic planning

Practice Leader: *Eileen Eastman*, Senior Vice President, *eeastman@yankeegroup.com*, 617-880-0281

CLECs have had mixed results in gaining market share in the past several years. Based on the past 3 years of survey results (see Exhibit 1), CLECs have gained market share with very small businesses (VSBs) and small businesses (SBs) and lost ground with medium-sized businesses (MBs). When we consider the mega-mergers of SBC/AT&T and Verizon/MCI, Verizon/MCI holds 26% of the SMB local telephone service market and the new SBC/AT&T holds 24%.

The former AT&T and MCI and the CLECs in general have higher SMB customer satisfaction scores, which have helped to keep churn rates low. We anticipate a continued focus on improving customer satisfaction scores by both CLECs and ILECs.

As the communications service providers continue redefining themselves around convergence and ubiquity, several questions emerge:

- *How will the mega-mergers of SBC/AT&T and Verizon/MCI affect the SMB ecosystem?*

- *How are the service providers doing on customer satisfaction?*

- *How will VoIP affect market share for service providers?*

Exhibit 1.
CLEC Share of the SMB Local Telephone Marketplace
Source: Yankee Group 2003 SMB Bundled Communications Survey, Yankee Group 2004 SMB Bundled Communications Survey and Yankee Group 2005 SMB Communications, Broadband and VoIP Survey
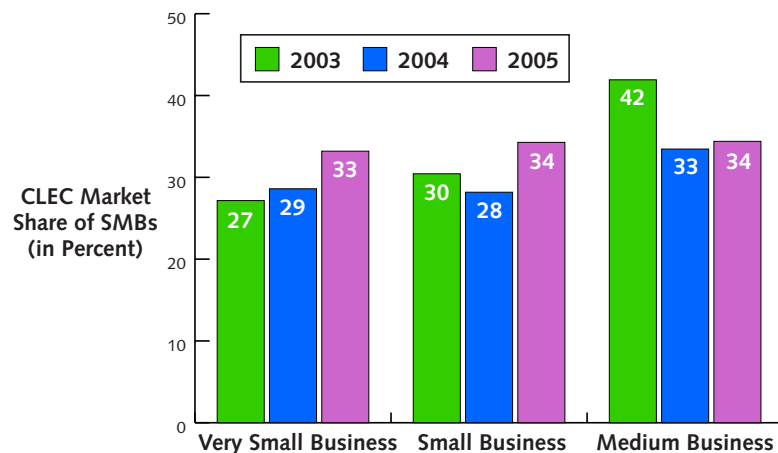
Table of Contents

I. Introduction

CLECs have exhibited a marketing presence and product development resurgence. Their continued focus on customer satisfaction, aggressive sales tactics and leading-edge SMB offerings make them worthy adversaries for the more staid ILECs.

The mega-mergers of SBC/AT&T and Verizon/MCI create new market dynamics for CLECs and ILECs in the SMB space; AT&T was the largest CLEC and MCI was a significant CLEC serving SMB customers. We anticipate the SMB focus will change for both of these former CLECs because they are now part of larger ILEC entities.

Before the mergers, MCI had a strong SMB team with good product offerings. Its MCI Advantage offering set an early standard for service providers with an IP-integrated access solution. Its offerings and channels were aligned to bring solutions to the SMB market effectively. With its strong brand name, AT&T brought SMB solutions to the CLEC market, albeit more delayed than some of its more nimble competitors. Nonetheless, AT&T began penetrating the low-end of the SMB space with its CallVantage offering. In the post-merger world, we don't expect SBC/AT&T and Verizon/MCI to begin rationalizing, refining and relaunching their SMB offerings until at least the second quarter of 2006 and more likely the second half of 2006 in the case of SBC/AT&T.

II. ILEC and CLEC Market Shares Before and After the Mergers

Based on 2005 (pre-merger) SMB data, Verizon leads the ILEC market share with 36% of the SMB market; SBC has 25% of the ILEC market. The remainder of ILEC share comes from Qwest and BellSouth with 15% and 10%, respectively, followed by various ILECs and rural local exchange carriers (RLECs), including Sprint, Commonwealth Telephone (CTE), CenturyTel, Alltel and Citizens (see Exhibit 2).

Exhibit 2.

ILEC Share of the SMB Market by Service Provider (Pre-Mergers)

Source: Yankee Group 2005 SMB Communications, Broadband and VoIP Survey
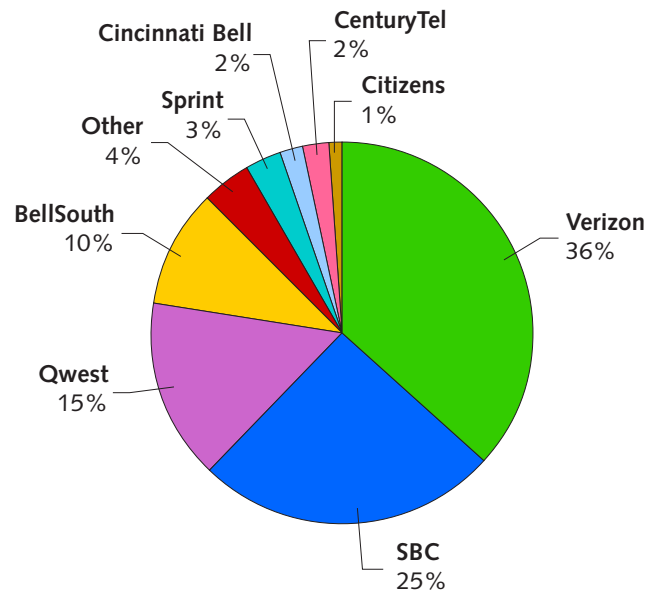
Note: Alltel and CTE had less than 1% market share.

The CLEC space is more fragmented than the ILECs. A variety of CLECs, none of which have significant market share, hold 28% of the SMB market. Named CLECs are led by AT&T, with 22% of the SMB market, followed by XO, Vonage and Cox, at 11%, 8% and 7%, respectively (see Exhibit 3).

We don't expect Verizon and the new AT&T to strongly target out-of-region SMBs because the merging companies conceived these mergers to build synergies in the enterprise market segments. However, in-region we anticipate the combined entities to create strong win-back and retention programs for SMBs with increasing focus on converged fixed/mobile solutions and bundling of business applications and IT infrastructure solutions including storage, security and PC management. We anticipate the remaining CLECs to lead the way with new SMB VoIP solutions, bundled offerings and sales support services.

Verizon and AT&T will lead the post-merger market share redistribution. Exhibit 4 shows total SMB market share for CLECs and ILECs combined. Half of the SMB marketplace will be controlled by AT&T and Verizon post-merger. Even though both providers will hold leading positions in the market, we anticipate robust SMB competition from the facilities-based CLECs such as XO and increasingly the multiple system operators (MSOs).

Exhibit 3.

CLEC Share of the SMB Market by Service Provider (Pre-Mergers)

Source: Yankee Group 2005 SMB Communications, Broadband and VoIP Survey

Cablevision 2%
MCI 3%
Comcast 2%
Sprint 5%
McLeod 6%
Other 28%
TWT 6%
Cox 7%
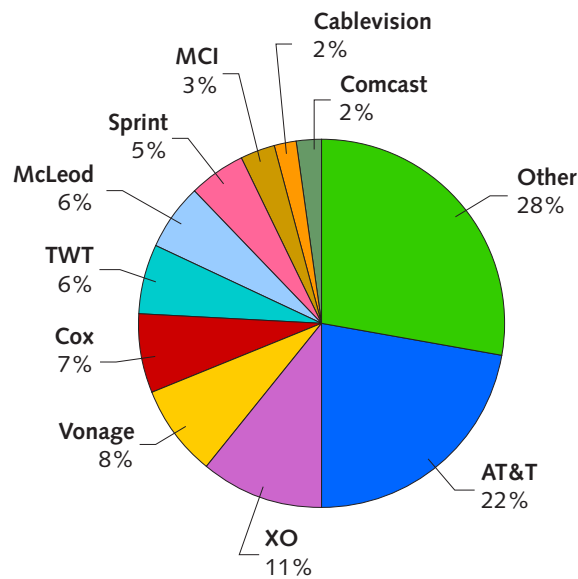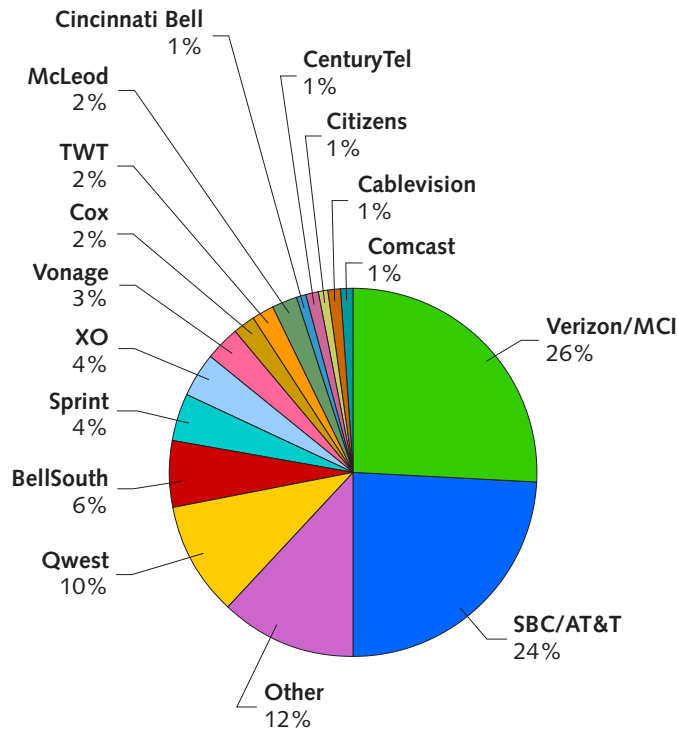Vonage 8%
AT&T 22%
XO 11%

Exhibit 4.

SMB Local Service Provider Market Share (Post-Mergers)

Source: Yankee Group 2005 SMB Business Communications, Broadband and VoIP Survey

Cincinnati Bell 1%
McLeod 2%
CenturyTel 1%
Citizens 1%
TWT 2%
Cox 2%
Cablevision 1%
Vonage 3%
Comcast 1%
XO 4%
Verizon/MCI 26%
Sprint 4%
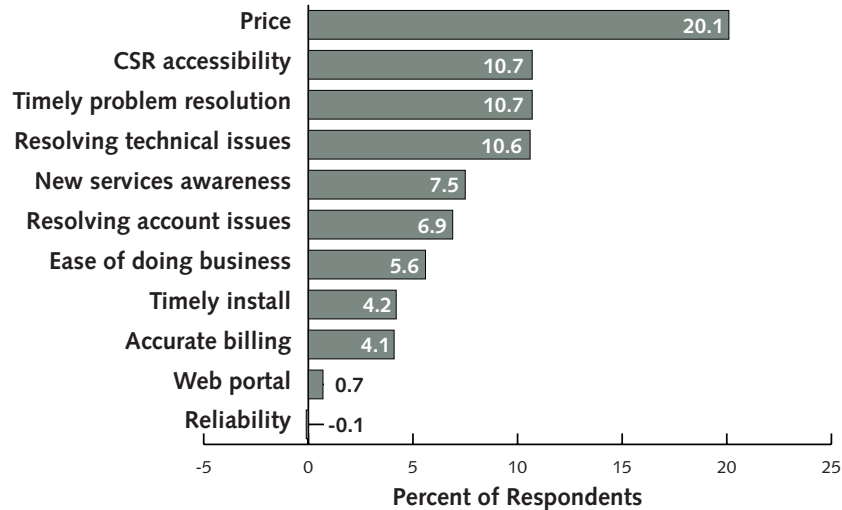BellSouth 6%
Qwest 10%
SBC/AT&T 24%
Other 12%

III.   SMB Customer Satisfaction

Compared to the CLECs, ILECs still have a way to go in improving SMB customer satisfaction scores (see Exhibit 5). CLECs lead ILECs most strongly in SMBs' perceptions of local service pricing, resolution of technical issues, timely problem resolution and customer service representative (CSR) accessibility. ILECs lead CLECs barely in SMBs' perceptions of network reliability.

Exhibit 5.
ILEC Gap in SMB Customer Satisfaction Relative to CLECs
Source: Yankee Group 2005 SMB Communications, Broadband and VoIP Survey

Category	Percent of Respondents
Price	20.1
CSR accessibility	10.7
Timely problem resolution	10.7
Resolving technical issues	10.6
New services awareness	7.5
Resolving account issues	6.9
Ease of doing business	5.6
Timely install	4.2
Accurate billing	4.1
Web portal	0.7
Reliability	-0.1

Historically, CLECs have set the customer satisfaction bar relatively high, which required the ILECs to play catch-up. Poor operational support and billing systems have been stumbling blocks for CLECs. However, in the past several years, CLECs have focused on improving their operations and billing systems to catch up with their desire to provide enhanced levels of customer touch. We anticipate increasing levels of customer satisfaction from CLECs as they continue to improve back-office systems.

ILECs need to continue focusing on the key drivers of customer satisfaction for SMBs timely problem resolution and quality, speedy technical support. Many SMBs get first-tier problem resolution and technical support through an IT consultant, value-added reseller (VAR) or reseller. ILECs not only must ensure quality inside their organization; they also must strive to improve customer satisfaction through their sales channels.

IV. Positioning VoIP Solutions to SMBs

CLECs have done a much better job preparing SMBs for the converged communications world of VoIP. Twenty-three percent of CLEC SMBs believe they have VoIP phone service today, compared to only 9% of ILEC SMBs (see Exhibit 6). Although we don't believe 23% of CLEC SMBs are actually using IP-enabled voice services, we do believe the CLECs have more effectively marketed their solutions as IP-ready, thereby convincing SMBs the CLEC is uniquely qualified to provide next-generation VoIP solutions today.

The ILECs historically have been slow in responding to competitive pressures in the SMB space, and VoIP is no exception. The premises-based VoIP vendors such as Toshiba, Nortel, Cisco, NEC and Samsung have consistently pitched the readiness of their VoIP solutions; the CLECs are pitching the readiness of their VoIP solutions, and the ILECs are once again relatively silent.

Exhibit 6.

SMB Phone Service for ILEC and CLEC SMB Customers

Source: Yankee Group 2005 SMB Communications, Broadband and VoIP Survey
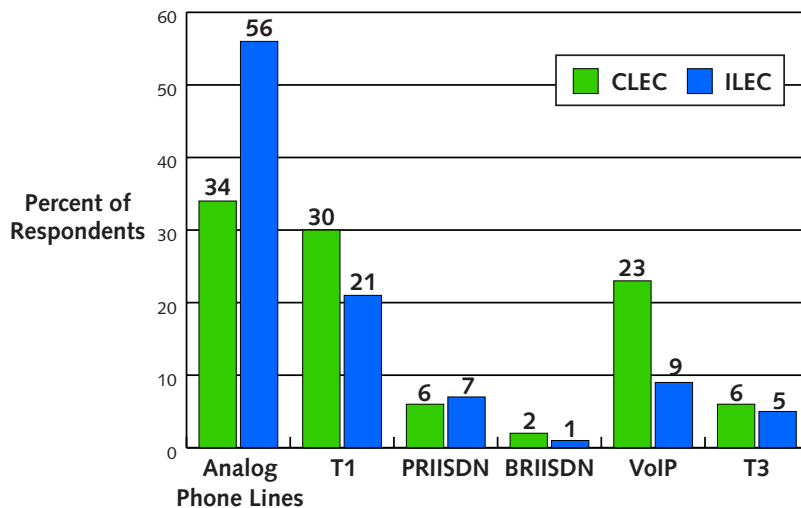
We anticipate continued competitive pressure from the CLECs in defining the SMB VoIP market space. Yankee Group expects the ILECs especially the AT&T and Verizon ILECs to be at least 12 to 24 months behind in deployment because they are more strongly focused on their enterprise businesses.

V. Conclusions

Recommendations for SMBs

- **When you're looking for information on VoIP, ask your trusted advisor to provide various alternatives.** Look to the CLECs to provide quantitatively more but not necessarily accurate information on VoIP. Expect scant information from the ILECs as their strategies around VoIP are not yet fully outlined. Expect fairly good and plentiful information from the premises-based vendors (but realize that to them, the best solution is a premises-based model).

- **If your levels of customer satisfaction are below par, consider switching to an alternative service provider.** ILECs and CLECs have strong programs in place to build customer satisfaction. If you're displeased with a particular interaction, let your service provider and channel partner know.

Recommendations for Channels

- **Provide a buffer between the SMB and its communications service provider.** SMBs have lower levels of customer satisfaction with ILECs than CLECs. Therefore, the channel partner has an opportunity to more closely tie a SMB to its services and levels of customer satisfaction. Longer customer lifetime and higher spending will result.

- **Present SMBs with both hosted and premises-based VoIP solutions.** One size doesn't fit all with SMBs, and SMBs' inclinations toward VoIP solutions change over time.

Recommendations for Service Providers and Vendors

- **ILECs should drive their customer satisfaction higher.** ILECs can accomplish this with targeted process improvement around technical support, CSR availability and problem resolution. Although churn levels have drastically reduced during the last 12 months, renewed competition from VoIP seeks to rekindle SMB churn.

- **CLECs should continue to educate their SMB customers and prospects about the value of their VoIP services**. Leaving all the SMB customer education to the premises-based VoIP vendors is a recipe for disaster for the service provider segment as SMB awareness of VoIP and VoIP penetration continue to increase.

VI. Further Reading

Yankee Group DecisionNotes^{SM}

Channel Partner Associations Create Opportunities for IT Vendors and Service Providers, December 2005

Why ROI Models Are Critical to SMB VoIP Adoption, December 2005

RLECs Must Have a Plan to Introduce VoIP to SMBs or Risk Irrelevance, June 2005

Comcast Ranks #1 in SMB Broadband Customer Satisfaction for 2004, June 2005

Yankee Group Reports

2005 SMB State of the Market Report, November 2005

Assessing the SMB VoIP Market, August 2005

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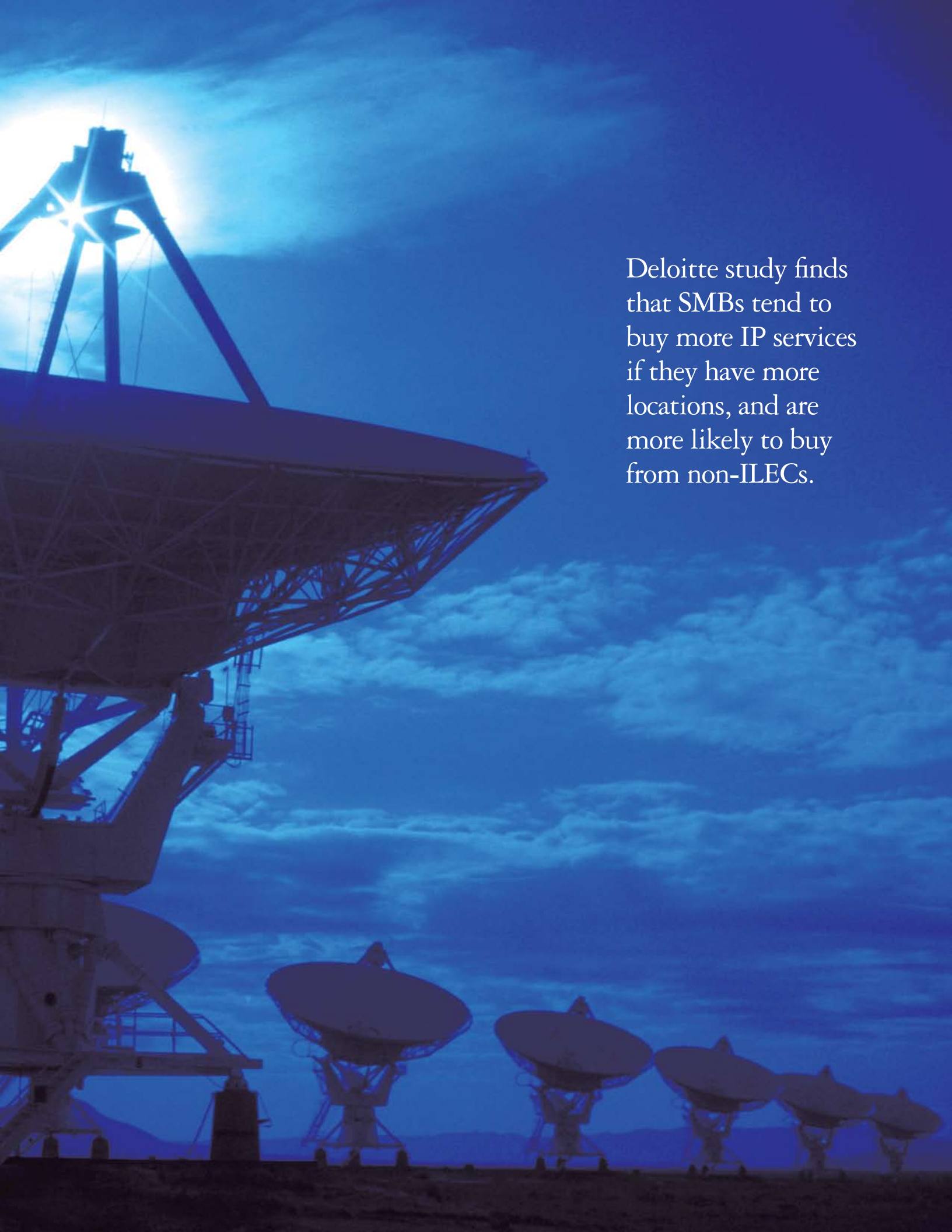
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A window of opportunity

SMB Communications: How Does the Number of Sites Drive
Small- and Medium-Size Business Communications Spend?

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Deloitte study finds that SMBs tend to buy more IP services if they have more locations, and are more likely to buy from non-ILECs.

If there's one area where small- and medium-size businesses (SMBs) feel underserved, it's the total communications solution. They're not imagining it. SMBs have, in fact, been the most neglected market segment because they haven't had the appeal of either the enterprise or consumer segments. Cable firms traditionally have focused on consumers, both in terms of how they've developed their physical networks and their products and services. Telcos have long served consumers, of course, but have re-energized this focus because of cable's recent triple-play competition. And, with the recent big-name telco mergers, the high value enterprise market is getting increased focus and attention.

Additionally, Incumbent Local Exchange Carriers ("ILECs") ILECs have limited IP product offerings, especially between 1.5 Mbit/s and 45 Mbit/s, and are concerned about T1 loss and cannibalization by cable companies. Cable companies, in turn, have been slow to move due to the competition for resources from other high growth areas and limited existing physical access to many SMB locations.

These factors have essentially left SMBs out in the cold, despite the fact that their high communications spending makes them a potentially very profitable market. In the current environment, SMBs face a lack of appropriately scaled, affordable products. Too large to be satisfied with a simple T1 line and too small to afford or to manage a DS3 connection, many SMBs simply aren't being presented with the products and services that meet their needs, at prices that are competitive. Add the additional expense and management of voice applications and equipment, and you have a disgruntled market segment.

This isn't to say that SMBs are completely ignored, but there's a disconnect. Typically, while this niche gets a lot of attention at the time of sale, they turn out to be of little interest to providers once acquired. And, SMBs have been able to do little about it. Yes, they've been served by ILECs and some Competitive Local Exchange Carriers ("CLECs"), but the reality is that with very little service provider choice, they have had few options. However, with increased adoption of IP, that scenario could change.

Recently, Deloitte Consulting LLP ("Deloitte Consulting") conducted a unique survey of SMBs across a number of U.S. industries to better understand their communications spending and identify the lines of differentiation in spending and needs. What are ILECs offering these companies compared with non-ILECs? What are the opportunities for communications providers to engage SMBs with the right solution at the right price?

• **SMBs need tailored, scalable solutions that package voice,
data, and managed services at a competitive price.**
The survey confirmed that the distinct disadvantages SMBs face when
it comes to having their communications needs met are around the
issues of price, service, and tailored solutions. Because SMBs don't
generate the same volume as large enterprises, it's difficult for them to
negotiate better rates. Due to their size, they are generally interested
in tailored solutions that package voice, data, and managed services
they are not getting from existing providers. And, they need services
that can be scaled to their needs.

• **The number of business locations is directly correlated to
more IP-centric spending.**
It's tempting to try to identify a correlation between industry
and spending in the SMB marketplace. Technology, media, and
telecommunications companies, along with consumer businesses,
spend the most per employee on communications, while life sciences
and healthcare business spend the least.

Industry	Business Locations			Total
	1	2-5	>5	
CB	$47	$142	$124	$109
EN & MFG	$95	$ 74	$83	$84
FS & RE	$111	-	$52	$91
LS & HC	$15	$106	-	$83
PS	$37	$20	-	$26
TMT	$73	$140	$258	$147
Total	$77	$106	$108	$98

CB: Consumer Business **MFG:** Manufacturing
EN: Energy **PS:** Public Sector
FS: Financial Services **RE:** Real Estate
HC: Healthcare **TMT:** Telecommunications, Media & Technology
LS: Life Sciences
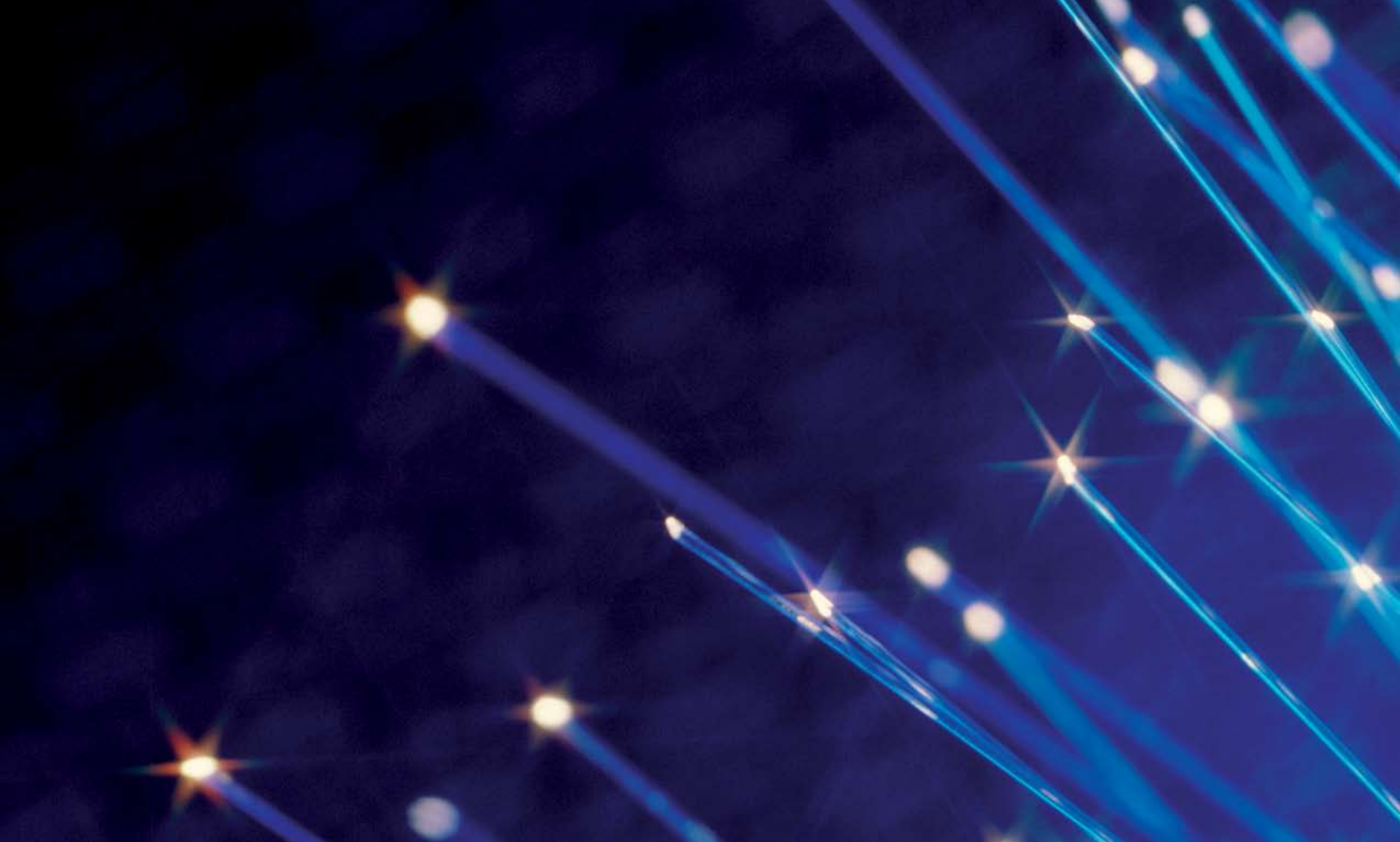
However, the data show the better determinant to be the number of business locations a company has. Deloitte Consulting looked at wireline spending by company size and found that a company with a single site that spends $100 on voice spends an additional $27 on data. However, when the number of sites increases to between two and five, a company that spends $100 on voice spends $114 on data. The data spending jumps to $140 for those with more than five locations. Indeed, monthly spending per employee increases 40 percent for companies with two or more locations.
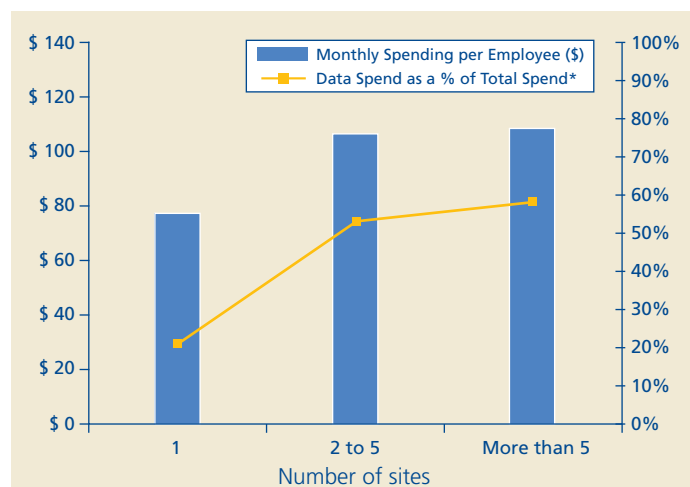
* Ratio is determined by monthly wireline data communication spend/ data+monthly wireline voice communication spend

Additionally, as sites increase, SMB companies turn from traditional landlines to VoIP. Only 18 percent of single-site companies use VoIP, while more than 70 percent of multisite companies use the technology. And, approximately 30 percent of multisite companies use both VoIP and Multiprotocol Label Switching ("MPLS") or other Virtual Private Network ("VPN") technologies, reflecting the SMB market's sophistication with IP-based services.

Number of locations	VoIP users[1] (%)	MPLS/VPN users (%)	VoIP and MPLS/VPN users (%)
1	18	-	-
2-5	71	50	29
More than 5	82	45	27
Total	58	33	19

[1] VoIP users include companies that have implemented trails, hybrid, or pure VoIP solutions

- **Multisite SMBs tend to become more IP-centric and spending per employee on communications increases as the number of sites increases.**

For obvious reasons, single-site location companies have minimal inter-location communication requirements of their service providers. With only one site, they tend not to be networked. But once SMBs have two or more locations, they have more internal communications and networking needs. Communications between sites is the driver, and data is more important, becoming a bigger portion of spending. Turn voice into data with VoIP, and the spending increases further.

For example, SMBs using VoIP spend $61 per employee monthly on voice and $45 on data, while those with traditional landlines spend $64 on voice and $23 on data per employee per month. VoIP users are 60 percent more likely to use non-ILEC services.

Clearly, SMBs with more than one location have greater communications needs and higher communications spending per employee. They're the ones that tend to adopt an IP-centric view, moving to IP for ease and cost—to be able to operate more simple networks—and are highly interested in competitive IP service offerings. What entrants into this market should understand is that data is the critical service and providing multilocation SMBs with affordable, tailored products and services is a new market opportunity.

- **Multisite SMBs are more likely to choose a non-ILEC for complete data-centric services.**

And, who's providing this service? The survey results indicate that – assuming they can find the products, customer service and pricing they need – SMBs that purchase large amounts of data services are much more likely to choose a non-ILEC.

Those single-site SMBs with minimal communications requirements are almost three times as likely to use an ILEC for voice service and twice as likely to use an ILEC for data service as well. But, multisite SMBs are about 20 percent more likely than single-site SMBs to choose a non-ILEC for voice and about 50 percent more likely for data service. According to additional Deloitte Consulting research, at that level, more complex communications needs drive a desire for an increased choice in suppliers and products, more tailored services, and lower prices. Currently, ILEC pricing is less attractive and their services are less likely to fit the needs of a multisite SMB.

Add to this landscape industry consolidation and the choices for SMBs are even less competitive. Consequently, ILEC alternatives, such as Value-Added Resellers ("VARs"), have made tremendous progress capturing these multi-site SMBs as customers for an IP-centric service platform. It appears providers who lead with data will win over SMBs with an IP-centric orientation.

- **SMBs are less concerned with brand and more interested in customer service, product reliability, bundled offers, and a complete service set.**

There are some interesting distinctions between large business purchasing criteria and that of SMBs. Large businesses, not surprisingly, are less price sensitive and more concerned with brand and reputation. Small- and medium-size businesses are less concerned with brand and act more on recommendations by trusted sources. Pricing is obviously more important to a smaller organization, but also key to the decision making are bundled offers and a complete service set. These companies also are very interested in product reliability and good customer service.

These findings open the door to providers like VARs who can provide attractively priced, quality data service. As the demand for IP services increases, SMB customers will shift their telecom spending to IP, with VARs bundling telecom and IP services with business communication services. This, in turn, could spark new competitive offerings from cable (which hasn't yet made much penetration into the SMB communications market) as demand for alternative access and IP services increase and begin to provide a viable revenue stream.

The message to providers who would serve SMBs is clear from this survey. Data is key to organizations with multiple locations. Those providers that can offer reasonably priced, comprehensive data solutions, by positioning products and services that are scalable and tailored to the needs of the customer, will win the SMB segment.

This slower transition to VoIP and IP services creates a significant window of opportunity for whoever is able to seize it. Whoever makes the move to launch appropriately priced services, invest in IP-centric networks, build distribution capability, and enhance their service set in the next few years will get the big advantage for the multisite SMB market.

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